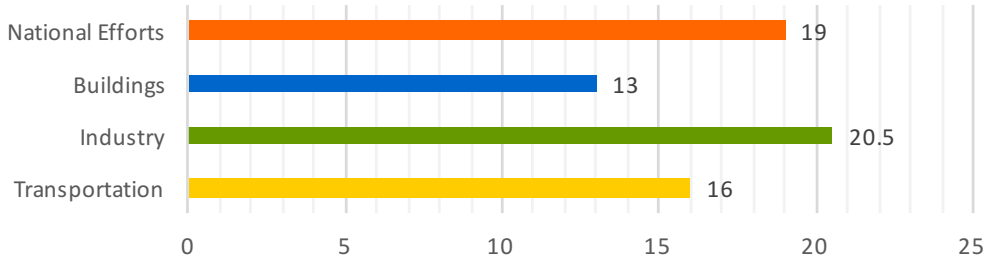
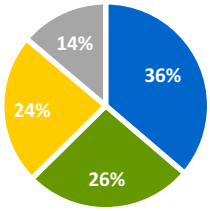
2 Japan





The bars show ACEEE scores for energy efficiency. The pie chart shows 2013 end-use energy shares of buildings, industry, transportation, and other sectors.

Coming in 2nd, Japan tied with Italy with a score of 68.5 out of a possible 100 points.

Japan earned second place in the national efforts category. With a significant reduction in energy intensity between 2000 and 2013, strong energy-saving goals, and one of the most efficient thermoelectric power systems, Japan is exemplary in leading energy efficiency efforts.

Japan also did exceedingly well in the industry section of our analysis. Japan has developed a mix of regulatory measures, voluntary actions, and financial incentives to encourage energy efficiency in industry. The Act Concerning the Rational Use of Energy introduced mandatory energy efficiency requirements for designated industries in 1978 and continues to serve as the foundation of Japan's energy efficiency policy. It requires companies to appoint an energy manager and report on the status of energy consumption every year, and includes a benchmarking system obligating businesses to achieve specific medium-term (2015) and long-term (2020) energy efficiency targets. The country supports these requirements with a tax incentive scheme including a special depreciation rate for all businesses investing in specified energy conservation and efficient equipment.

Japan scored well in the transportation category, tying for first place with Italy and India. Japan has set ambitious fuel economy standards for passenger vehicles (45.9 mpg by 2025), and average on-road fuel economy is equally impressive at 45.2 mpg. Japan established the first fuel economy program for heavy-duty vehicles in 2005 and is one of only four countries in our list of evaluated countries to have done so to date.

AREAS FOR IMPROVEMENT

The largest area for improvement in Japan is in the buildings sector. Japan ranked 13th in the buildings section of our analysis due to its uneven residential and commercial building codes and a complete lack of building energy labeling initiatives. Japan also has no comprehensive building-retrofit policy and requires owners or developers to submit an energy savings plan only when large renovations are undertaken. Japan has a great opportunity to increase the energy efficiency of its buildings by strengthening building codes, improving code compliance, and implementing mandatory labeling programs for all buildings.

While Japan scored well on industrial energy efficiency, and commitment to efficiency in its industrial sector is strong, the percentage of CHP in Japan's power capacity is very low. However the government offers support to help encourage a greater contribution from CHP. The country's Ministry of Economy, Trade, and Industry (METI) has studied barriers to expanded CHP deployment and established an office focused on promoting CHP in Japan, actions that could be further supported by a comprehensive package of incentives. These efforts can help Japan narrow the gap with Germany, the top-ranking country.